

DOCUMENT RESUME

ED 291 780

TM 011 065

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TITLE Physical Education in the Portland Public Schools Middle Schools. Phase One, 1986-1987 Evaluation Report.
INSTITUTION Portland Public Schools, OR. Research and Evaluation Dept.
PUB DATE Oct 87
NOTE 81p.
PUB TYPE Reports - Evaluative/Feasibility (142) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC04 Plus Postage.
DESCRIPTORS Curriculum Guides; Junior High Schools; Lifetime Sports; *Middle Schools; *Physical Education; Physical Examinations; Physical Fitness; Program Evaluation; Public Schools; Recreation
IDENTIFIERS *Portland School District OR

ABSTRACT

This is the final report of Phase 1 of a district-wide study of the status and needs of the physical education program (PEP) in the Portland Public Schools middle schools in Oregon. Data collection activities, conducted during the spring of 1987, included interviews, questionnaires, classroom observations, literature reviews, document analysis, and fitness tests. Principals indicated a need for lifetime skills, fitness, recreation and social activities, improvement of attitudes and self-esteem, and physical activities. Physical education teachers indicated that the curriculum tended to underemphasize fitness, and they cited a need for year-long programs, better communication and articulation with lower grades, and revision of the curriculum guide to reflect more modern fitness concepts. Due to various uses of the PEP curriculum guide, it appears that the extent to which the goals and activities in the guide are covered through instruction is unclear. Lifetime skills, recreation, and fitness, especially cardiovascular fitness, were mentioned as focal points. Classroom observation revealed an emphasis on team sports, with individual or lifetime sports being observed as the second most frequent type of activity. An outline of the data collection plan and copies of data collection instruments are appended. (TJH)

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1986-1987 EVALUATION REPORT

PHYSICAL EDUCATION

IN THE PORTLAND PUBLIC SCHOOLS MIDDLE SCHOOLS

Phase One



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Portland, Oregon
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October, 1987

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PHYSICAL EDUCATION IN THE PORTLAND MIDDLE SCHOOLS

Phase One

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Portland Public Schools

October, 1987

ADMINISTRATIVE SUMMARY

This is the final report of phase one of a district-wide study of the status and needs of the Physical Education program in the Portland Public Schools middle schools. The purpose of the study is to assess the strengths and weaknesses of the PPS Physical Education program in terms of the curriculum goals and objectives, allocated time, facilities and the extent to which the program addresses student needs. The study focuses special attention on the extent to which the P.E. program addresses the physical fitness needs of middle school children. Phase two of the study, to be conducted during the 1987-88 school year will examine the fitness of these students as indicated by a standardized test of performance.

The study addressed two major sets of questions, one set dealing with current status of the physical education program and a second set dealing with future policy issues. Six different types of data collection activities - interviews, questionnaires, classroom observations, literature review, document analysis and fitness test data sought answers to the questions. All data were collected during the spring of 1987.

Middle school principals identified a wide range of student needs to be served by physical education. Although there was no single dominant need identified, the most commonly cited needs were for lifetime skills, fitness, recreation and social, attitudes and self esteem and physical activity. Most principals felt their programs provided an adequate emphasis on fitness especially long-term fitness and lifetime sports.

Physical education teachers, responding to our survey, indicated that the PPS curriculum tended to underemphasize fitness. They cited a need for year-long programs, better communication and articulation with lower grades and revision of the curriculum guide to reflect more modern fitness concepts.

The principals' interviews reveal that the P.E. Curriculum Guide is being used in a variety of ways with numerous qualifying conditions. Therefore the extent to which the goals and activities in the guide are covered through instruction is unclear. The most frequently mentioned curricular emphasis was lifetime skills. Fitness - especially cardiovascular fitness was mentioned as a focal point as was social interaction and recreation.

Classroom observations revealed an emphasis on team sports such as soccer, softball, volleyball, etc. during the observation period in the late spring, with 15 classes engaged in these activities. Individual or lifetime sports were the second most frequently observed activities, with six classes teaching them.

Extra-curricular programs were found in nine of the middle schools. Twelve schools reported having an intramural program. All 12 of these included basketball in their program, seven had track, field or cross country running, while five each had volleyball and gym hockey. A variety of other sports was represented by one or more of these programs. There was no indication that any of these intramural or extramural activities was restricted to any special segment of the population.

A variety of approaches are being used to measure and monitor physical fitness. The teacher survey revealed that the AAHPERD test and the Fit-N-Dex were each in use by five middle schools, while five others used some other type of measure. Data were not collected by the remaining three schools. Attempts to aggregate student fitness data from the schools on these measures was unsuccessful for a variety of reasons. First, since the P.E teachers didn't expect to be required to turn in such data, those using the Fit-N-Dex, sent computer printouts home with the children for their parents to review but, in only one case did the school keep copies for their own records. Second, those using other tests such as the AAHPERD were not able to provide consistent records that lent themselves to across building summarization. Third, a few schools have developed their own systems for measuring and reporting fitness which are unique to the school and therefore not aggregatable with results from other schools.

The current methods of measuring and monitoring student fitness are adequate, in most cases, for providing information to teachers and students on the status of fitness and to some extent the effectiveness of instruction. However, the lack of a standard approach precludes any districtwide assessment of fitness status or improvement over time.

Twelve of the 15 schools responding to the teacher survey indicated support for a district-wide standard for fitness. Comments from the teachers indicated an interest in improving accountability for fitness and taking more responsibility for youth fitness. If it were left entirely to the teachers a fitness standard would be established and measurement would be standardized.

The findings suggest four major conclusions. First is that the curriculum guide, Physical Education K-8 Continuum, is in need of revision to bring it up to date and make it more congruent with the established course and program level goals. The guide, developed in the mid 1970s, does not reflect the same balance of fitness, lifetime and team sports skills embodied in the more recently developed course and program goals.

Second, it was apparent from principal interviews and

teacher survey information and was supported by document review, that the physical education and health education curricula are not consciously coordinated so as to reinforce one another. In one middle school these subjects are taught by the same staff, providing an opportunity to treat fitness and health in a more systematic and integrated fashion. Further study of this approach could provide information useful in developing a more articulated curriculum bridging the two subject areas.

Third, given the limitations of space, staff, schedule constraints and the need for changes identified above, the middle schools are doing an admirable job of serving the fitness needs of students while attempting to provide a broad range of activities. In an idealized situation, students would receive physical education all year long, instead of one semester a year, thereby providing sufficient opportunity to experience the recommended minimum amount of exercise for maintaining fitness. However, serious obstacles to this exist in the need to allocate teachers to schools in an efficient manner. Combining physical education with health education might help to alleviate this problem, but it would create another problem by requiring that all teachers in one subject carry an endorsement in the other as well.

Fourth, PPS does not currently have in place a systematic fitness testing program that will provide data for monitoring the physical fitness status of our students. If there is to be a set of districtwide standards developed for the fitness of our students then a measuring and monitoring system is obviously needed to provide the data required to enable teachers and principals to assure the effectiveness of the program.

RECOMMENDATIONS

Based on the findings and the conclusions discussed in this report the following recommendations are proffered for consideration. They are listed here in no particular order of importance.

- 1.) The curriculum guide, Physical Education K-8 Continuum, should be reviewed by the Curriculum Department for the purpose of deciding whether to revise it or not. Any revision should seek to attain better alignment with the course and program level goals.
- 2.) The Board of Education should give serious consideration to establishing a physical fitness achievement goal for the district.
- 3.) The Curriculum Department should adopt a standardized fitness testing program using the Cramer Fit-N-Dex.

- 4.) The Curriculum Department should study ways of improving the articulation of health and physical education.
- 5.) The appropriate district administrators should examine the feasibility of a year-long physical education program for middle school students. Such a program would have the advantage of enabling teachers to offer a wide range of activities and provide fitness training over a longer period of time, thereby increasing the probability that skills, attitudes and knowledge acquired would transfer to a child's everyday life. This recommendation should be considered in conjunction with recommendation four to see if the integration of health, fitness and physical education can somehow facilitate the development of a year-long comprehensive program.

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INTRODUCTION

This report is the final report for the first phase of a district-wide study of the status and needs of the Physical Education program in the Portland Public Schools. The study is being conducted in two phases over a two year period. Phase 1 concentrates on a program review and needs analysis in the middle schools, while Phase 2, to be conducted in 1987-88 will examine the fitness of middle school children as indicated by tests of performance. An interim report, published in April, 1987 contained the results of the first data collection activity, interviews with middle school principals. This report adds two other kinds of data to that previously reported, teacher survey data and physical education class observations. In this report these three types of data are combined with curriculum information and background literature to provide an expanded view of the curriculum, activities, processes and outcomes of physical education in the School District No. 1 middle schools.

All data for this phase of the study were collected during the late winter and Spring of 1987. The principal interviews were conducted during the month of February by members of the Research and Evaluation Department's program evaluation unit using a structured interview guide. The survey of all middle school P.E. teachers was conducted during March and the observations were conducted during May.

Study Purpose

The purpose of the total study is to assess the strengths and weaknesses of the PPS physical education program in terms of the curriculum goals and objectives, allocated time, facilities and the extent to which the program addresses student needs. The study focuses special attention on the extent to which the P.E. program addresses the physical fitness needs of the children it serves. Possible uses of the data include:

- 1.) identification of program strengths and weaknesses,
- 2.) use of the information to guide the development of new goals and objectives (curriculum revision) and to revise instruction,
- 3.) informing decisions regarding the formulation of district-wide standards for physical fitness.

This report provides the Director of Curriculum, the district Physical Education Specialist, the Board of Education and other interested parties a more complete picture of the

results of the middle school phase of the study. The results are expected to be useful to these decision makers as they examine current physical education policy and set future directions for the Physical Education program in the district.

STUDY QUESTIONS AND METHODOLOGY

The study sought answers to a set of questions which were based on discussions with the Board of Education Chairman, the Superintendent, Director of Curriculum and the District Physical Education Specialist. The questions fall into two major categories, current status and future policy. Data collection methods were developed to address each question in the most appropriate manner. The principle of eclecticism (Cooley and Bickel, 1985) was followed to provide the most comprehensive, valid and reliable data. Following this principle results in multiple data collection activities, each designed to obtain the best available information to answer a particular question of interest to the researcher. In this study it meant that six types of data gathering activities were planned - interviews, questionnaires, classroom observations, literature review, document analysis and fitness test data analysis.

Study Questions

The study addressed the following questions.

1.0 Current Status

- 1.1 What are the curricular goals of the Physical Education program?
- 1.2 To what extent do the goals address physical fitness?
- 1.3 Do the goals adequately address the physical education needs of children in the Portland Public Schools?
- 1.4 What is the current physical education instructional program in terms of curriculum and extracurricular activities?
 - 1.4.1 What is being taught and to whom is it being taught?
 - 1.4.2 What extracurricular programs are available and to whom are they available?
- 1.5 How consistent and effective is the Physical Education program in meeting its goals and serving children's needs?

- 1.6 How is physical fitness within the program being measured and monitored?
- 1.7 Is the current method of monitoring fitness effective and satisfactory?

2.0 Future Policy

- 2.1 Should there be a measurable district-wide standard for physical fitness?
- 2.2 What is the best way to monitor attainment of fitness goals district-wide?
- 2.3 Should the Board of Education set district-wide fitness goals?

The complete data collection plan including the study questions and corresponding data collection methods is included in appendix A.

RESULTS

Middle School Principal Interviews

A structured interview format comprised of nine questions was used to obtain input from the eighteen middle school Principals regarding specific characteristics of the Physical Education program in their schools. (A copy of the interview guide is included in appendix B.) Each Principal was interviewed in his/her office by a staff member of the program evaluation unit of the Research and Evaluation Department. The interviews averaged approximately 30 minutes in length, focusing on the nine topical areas shown below.¹

1. Instructional time, size and scope of program
2. Pupil - teacher ratio
3. Combined classes
4. Use of the Curriculum Guide
5. Fitness and development
6. Program articulation
7. Student needs
8. Program changes needed
9. Parent involvement

¹. A more detailed account of the principal interviews is to be found in the Interim Report.

Instructional Time, Size and Scope of Program

Of the eighteen Principals interviewed only three indicated that the amount of time allocated to Physical Education in their schools was not "about right". Those three felt that more time should be allocated to P.E. than the state and county recommended amount of 8 percent. No Principal felt that the time allocation was excessive.

Ten of the middle schools reported that they required one semester of P.E. each year. One requires two quarters, another requires two trimesters plus one trimester of dance. Two schools require a full year while one requires a full year for sixth grade but not for higher grades.

When asked if they would expand their P.E. programs, given adequate space, only four of the Principals cited gym space as the most significant problem. Teacher f.t.e. allocations, contract requirements, and staffing were more commonly cited limitations on expansion.

Pupil-Teacher Ratio

Pupil teacher ratios ranged from as low as 25:1 to as high as 48:1. Sixteen of the Principals felt that the current ratio in their school was acceptable, appropriate, adequate or good. Only two felt that it was too high.

Combined Classes

All but one of the middle schools have combined classes that span two grade levels. All programs include both boys and girls in the same classes. Advantages cited were mostly for scheduling. Disadvantages related to differential maturity of students. Presently there seem to be no major problems resulting from combined classes. On the whole the comments were more favorable than unfavorable.

Curriculum Guide

Responses indicate that the Curriculum Guide is used, but in a variety of ways and with numerous qualifying conditions. None of the Principals report that it is strictly adhered to. Strengths cited for its use included curricular continuity, encouraging systematic teaching, laying out of goals, breadth and scope of skills covered, etc. Weaknesses cited included lack of inservice, old or outdated goals, too many things to cover and lack of long range fitness goals. In general the guide was viewed as needing revision.

Fitness and Development

Most Principals see their P.E. program as providing adequate emphasis on fitness, with several mentioning long term fitness and lifetime sports as major emphases. Recreation was also frequently mentioned as a point of emphasis. A balance across goals was mentioned as the emphasis by several respondents. In general the Principals seemed to feel that programs should be balanced with team sports receiving the least emphasis.

Program Articulation

The schools seem to be about evenly divided into those in which P.E. and Health are well articulated and in some cases taught by the same people and those in which there is very little or no coordination between the two subjects. In the latter the common observation is that Health and Science are taught together. The need for a Health endorsement if one teaches more than two health classes was cited as an obstacle to articulation in one school. Another mentioned that all the P.E. teachers in the school were Health certified.

Except for those schools containing both fifth and sixth grades there appears to be very little, if any P.E. program articulation between the fifth and sixth grades. Several Principals cite communication problems with feeder schools.

Student Needs

Principals listed a wide range of student needs that should be served by P.E. The most commonly mentioned needs were lifetime skills, fitness, recreation and social, attitudes and self esteem and physical activity. There was no clearly dominant need identified, although the modal need referenced was probably for lifetime skills and fitness.

Program Changes Needed

At least four Principals mentioned the need for more support for teachers to attend Don Bird's monthly meetings. Space, f.t.e. , teacher training, equipment and a standard district-wide curriculum were also cited as needs. Many laudatory comments were made about Don Bird's leadership and philosophy.

Parent Involvement

Principals were unanimous in their support for the idea of obtaining input from parents through local, building level meetings. Most indicated that they thought the LCAC would be the best forum for a discussion of the P.E. Program. The original study plan called for the collection of parent data, but these

data were not collected due to time constraints on the program evaluation staff.

Teacher Survey

In March a nine item survey questionnaire was sent to 31 physical education teachers in 17 middle schools. The cover letter indicated that the data were being collected in response to a Board of Education request for information on the P.E. program and they would be used to inform board policy regarding the P.E. program. Respondent names were not requested and anonymity was guaranteed. After a followup letter was sent out questionnaires were returned by 15 schools. A copy of the questionnaire can be found in appendix B.

Survey results

Question one sought information on the percent of class time spent on each of a number of different activities drawn from the Physical Education Curriculum Guide. The activities or "components" are grouped into categories. Data from three of the schools were not usable since the percentage of time allocated across components for each of them exceeded 100 percent. Data for the remaining twelve schools is shown in Table 1, below.

Question one: ... please indicate the amount of instructional time you devote to each activity area.

The highest average percentages of time were allocated to team sports (18.92), basic game and sports skills (13.83), total body development (11.58) and individual and recreational sports (11.13). Total body development is one of the subcategories of fitness and body development, therefore this could be viewed as a crude indicator of the relative emphasis on fitness.

Question two: In your view, does the PPS Curriculum Guide adequately emphasize the fitness needs of children?

Of the fifteen responses to this question, nine felt that fitness was underemphasized, while six felt that it was emphasized just enough. Specific suggestions for improving the Curriculum guide included four suggestions to include specific exercises in the guide, three suggestions to stress fitness more, two suggestions to include cardiovascular fitness and one suggestion to include lifetime activities in the guide.

Question three: Fitness goals specifically included in P.E. instruction are shown in Table 2.

Table 1. Instructional Time Allocation by Curriculum Activity Component

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Categories and Components Grades 6-8

Category	Component	Percent Time
Movement	locomotor	3.88
	non-locomotor	3.38
Fitness and Body Development	Arm and shoulder development	4.08
	Trunk development	3.38
	Leg development	4.96
	Total body development	11.58
Games and Sports	Basic game and sport skills	13.83
	Relays	3.08
	Team sports	18.92
	Individual and recreational	11.13
Gymnastics	Safety	3.13
	Tumbling	3.58
	Stunts	2.00
	Apparatus	3.67
Rhythms	Foundation skills	1.08
	Dance	1.75
Personal and Social Development	Sportsmanship	3.83
	Personal hygiene	1.42
Other	Cooperation	.67
	Problem Solving	.08
	Honesty	.42
	P.E. concepts	.42
	Responsibility	.42
	Heart & muscle lab.	.42
	Fit N Dex	.58
Total		101.67*

* Total exceeds 100 % due to rounding.

Table 2. Specific types of goals included in Physical Education instruction by middle school teachers.

Goal	Frequency
Increase cardiovascular/endurance fitness	7
Upper body strengths	4
Maintenance of fitness levels	3
Increase aerobic capacity	2
Increase knowledge of personal fitness	2
Jogging	2
Others	4
Total	24

Each of the fifteen schools responding listed specific goals for fitness. The most commonly mentioned goal category was cardiovascular fitness with upper body strength second. Since cardiovascular fitness and aerobic capacity are closely related we can easily observe that nine responses or 37.5 percent include one or the other of these as specific goals.

Fitness activities: Question three also asked the teachers to list specific fitness activities they conducted in relation to their fitness goals. Table 3 contains these data.

Table 3. Fitness activities included in instruction

Activity	Frequency
Jogging/running	12
Jump rope	5
Circuit training	5
Aerobics - dance/fitness	5
Specific strength exercises	4
Weight training	3
Situps	3
Pushups	3
Sprints	2
Fast paced games	2
Cardiovascular endurance	2
Jumping jacks	2
Unit on testing	2
Total	50

These responses seem to indicate a broad variety of fitness activities with no particular emphasis. If all aerobically related activities are grouped together and all muscular strength

development activities are grouped together and a third category of "other" is created then a slightly different picture emerges, as illustrated in table 4.

Table 4. Fitness Activities by Aerobic, Muscular and Other

<u>Aerobically related</u>	<u>Muscular development</u>	<u>Other</u>
jogging/running (12)	specific strength (4)	circuit
jump rope (5)	weight training (3)	training (5)
aerobics-dance (5)	situps (3)	games (2)
cardiovascular(2)	pushups (3)	testing (2)
sprints (2)		
jumping jacks (2)		
Totals	28	13 9 50
Percent	56	26 18 100

The schema in Table 4, while somewhat arbitrary, provides at least a crude analysis of the relative emphasis the survey respondents placed on each of the three categories of Aerobically related, muscular development and other. It is recognized that these categories are not mutually exclusive and have no external validity. If accepted at face value, however this classification scheme would indicate that the respondents tend to emphasize aerobically related fitness activities over muscle development and other types of activities.

Question three also asked "In general, how do you deal with fitness in your classes?" Responses to this inquiry ranged from incorporating an aerobics unit (1 response) to daily warmups or calisthenics (6 responses). Two schools indicated that fitness is ongoing throughout the semester; two reported teaching fitness units; one reported that fitness was taught twice a week and one indicated that one day a week was devoted to fitness.

Question four: On question four "Is physical education articulated in any way with the health curriculum in your school," eight schools responded affirmatively and six responded negatively. One school left the response blank. Those who answered "yes" to this question were asked to explain how the articulation was accomplished. Of these explanations, four pertained to the incorporation of cardiovascular/muscular fitness into the P.E. instruction while three mentioned that health units are used in P.E. classes. In one school the P.E. teachers are also health teachers thus facilitating articulation.

Question five: Do you currently have an intramural activities program in your school? Twelve of the fifteen middle schools reported having an intramural program while three responded "no" to the question. When asked what schedule their intramural program was on, A or B, eight responded with "B" , two

with "A" and the remaining two did not respond. The most popular intramural sport is basketball, with all 12 participating. Volleyball and gym hockey were tied with five schools each while track and field was included in four schools. Cross country and team handball were mentioned by three schools. Other sports reported by two were wall ball, paddle ball, gymnastics/tumbling, archery, badminton and individual activities.

Question six: Do you currently have an extramural activities program (involving other schools?) Nine schools indicated "yes", five "no" and one abstained. Those answering "yes" were asked who conducts the program. Six of them indicated the program was conducted by a person from outside the school, five indicated a person from inside the school and one indicated that there was no one individual responsible for the overall program, but each sport was handled individually. Obviously some respondents indicated that extramurals were handled in more than one way in their schools. Only three schools indicated that extended responsibility pay was received by their extramural coordinators.

Question seven: In your opinion, should the district have a measurable district-wide standard for fitness? To this question, twelve schools responded "yes" and three responded "no." A few sample comments follow:

Yes, I feel it would provide for more consistency throughout all programs. It would make everybody more accountable. It would have to be one that most everybody would feel comfortable with.

It would hold P.E. teachers and schools responsible for the overall fitness for today's youth. It would make Physical Education classes have more prestige in the community.

Yes, I feel it would provide for more consistency throughout all programs. It would make everybody more accountable. It would have to be one that everyone would feel comfortable with.

A consistent means of fitness measurement is necessary for the district as a way to indicate our students' needs.

I think it should be part of our testing competencies just like for any other subject matter class.

And on the negative side:

Unrealistic goal unless kids are given P.E. all year

and classes are of manageable size.

Obviously, the level of support for district-wide standards of fitness is very high among Portland's middle school physical education teachers.

Question 8: What method is used for measuring or monitoring fitness in your school? Response to this question were evenly distributed with five each indicating, the AAHPERD, Fit-N-Dex and other. "Other" included adaptations of the AAHPERD and various home made tests.

Question 9: Are fitness tests given: once a year, twice a year or periodically throughout the year? Nine schools indicated twice a year, spring and fall; six indicated periodically throughout the year and none indicated once a year only.

Additional comments: Six of the fifteen respondents took the time to offer comments. These were mostly critical of the program but offered constructive suggestions. Problems cited included low priority for P.E., lack of women teachers, overcrowded classes, poor communication with feeder schools, questioning the value of the survey, problems with the curriculum guide being out of date and the "unit oriented " nature of the program. The comments are included verbatim in Appendix C.

Classroom Observations

During the month of May classroom observations were conducted in thirty P.E. classes. At least one class was observed in each of the eighteen middle schools and no more than two were observed in a school. The observations were conducted by members of the Research and Evaluation Department, using a structured observation guide, a copy of which can be found in Appendix B. The main purpose of the observations was to look for a connection between curriculum fitness goals and class activities. A secondary purpose was to develop a general description of the instruction being provided in the program. The observation sessions began with a brief interview of the instructor in which information was sought on the following items:

- o number of times the class meets each week
- o length of class period in minutes
- o number of students
- o grade levels included
- o number of certified teachers
- o number of instructional aides
- o instructional goals for the day
- o relationship of lesson to school or district-wide activities.

Following the brief interview the observers observed each class to obtain information on each of the following variables:

- o instructional setting
- o use of teaching stations
- o instructional group size
- o activities
- o instruction

At the end of the class period the observer asked the instructor "How would you relate today's activities to fitness?" The answers obtained to this question are summarized at the end of the following section.

Observation Results

The pre-observation interview data are summarized in tables 4.a and 4.b.

All middle schools seem to have a uniform schedule for P.E. with classes of 40 to 45 minutes in length, five days a week for a semester. Class sizes range from 17 students and one instructor to 69 students and two instructors. The latter representing the not uncommon practice of combining two classes and team teaching them as a single class. The average pupil teacher ratio was 32:1.

Schools were widely split on the practice of combining grade levels within a class. Of the 30 classes observed, 14 were single grade classes, seven combined two adjacent grades and nine combined three grades in the same class.

Only four schools (five classes) reported the use of instructional aides in P.E. Approximately an equal number made use of student assistants from within the class. This study did not examine how the student assistants were used.

Table 4.a. Pre-observation Interview Results

PHYSICAL EDUCATION OBSERVATION DATA

Interview Questions

Class Number	a. Class mtgs. Per week	b. Class Duration	c. Number of Students	d. Grade Levels	e. Number Instrs.	f. Number Aides
1	5	45	21	6	1	3*
2	5	45	29	6	1	1*
3	5	45	35	8	1	
4	5	40	28	8	1	
5	5	45	23	5-7	1	
6	5	41	29	7-8	1	
7	5	41	17	7-8	1	
8	5	41	17	7-8	1	
9	5	41	29	7-8	1	2*
10	5	45	34	7	1	
11	5	45	30	6	1	
12	5	45	30	6-7-8	1	1
13	5	45	24	6-7-8	1	1
14	5	45	33	6-7-8	1	
15	5	42	69	6-7-8	2	1
16	5	40	48	7-8	1	
17	5	46	50	7-8	1	
18	5	42	47	8	2	
19	5	42	37	6	1	1
20	5	40	30	6	1	
21	5	40	19	6-7-8	2	
22	5	39	39	6-7-8	2	
23	5	39	30	6	2	
24	5	40		7-8	1	1
25	5	42	28	7	1	
26	5	42	22	8	1	1*
27	5	42	37	6	1	1*
28	5	43	35	6	1	
29	5	42	32	6-7-8	1	
30	5	42	24	6-7-8	1	
Mean	5	42.4	29.57	n/a	1.17	n/a
Range	5-5	39-46	17-69	n/a	1-2	0-3

* student
aide(s)

Table 4.b. Pre-observation Interview Question 2.a. - Objectives/Goals

<u>Goal/Objective Topical Area</u>	<u>Frequency</u>
Softball skills/rules	10
Warm-ups	5
Physical fitness	4
Soccer finals/drills/skills	4
Games - indoor/outdoor	3
Track and field	2
Field day skills	2
Fitness electives	2
Badminton, introductory	1
Golf, introductory	1
Social interaction	1
Sportsmanship/attitude	1
Team handball	1
To Survive	1
Test review	1
Total	39

The frequencies in table 4.b. were compiled by grouping similar responses to the question together under a general heading. The emphasis on softball and soccer skills is reflective of the time of year the observations were conducted and is not viewed as an indicator of a more general emphasis on team sports.

In response to question 2.b., "Are today's activities related in any specific way to school-wide activities or district emphases," the most frequent responses were "no emphasis" (14), "normal classes or curriculum" (9) and "field day" (7).

Instructional setting

Three types of instructional settings were observed. Thirteen classes were conducted indoors and 13 were conducted outdoors. Four classes had activities taking place both indoors and outdoors either simultaneously or in a sequence. The reasons for the location of the class tended to be based more on the type of activity planned for the day than on the weather. In the classes conducted outside, roll was taken and warmups, if any, were conducted indoors. In one case the class moved outside because the gym had been preempted by a group rehearsing for a school assembly. In one other case the class met in the cafeteria for aerobic fitness using the Jane Fonda workout tape. In yet another case the classes were so large that although there were two gyms available, it was necessary for one class to be outside while the other used the gyms. During foul weather this posed crowding problems. This particular school is slated for a new gym this year.

Use of teaching stations

Ten of the thirty observed classes use multiple teaching stations for instruction on the day of the observation. Numbers of stations in use in these ten classes ranged from two to nine. In twenty of the classes teaching stations were either observed to be not-applicable or demonstrations were conducted at a single station. It seemed obvious that the instructors knew when and how to most appropriately make use of teaching stations for development of specific skills and demonstrations.

Instructional group size

Four size categories were arbitrarily designated to obtain a sense of the extent to which instruction took place in groups that were large (n greater 25), medium (n greater than 15 but less than 25), small (n less than 15) or individually. Fifteen of the 30 classes conducted instruction in medium sized groups on the day observed. Eight classes used large group instruction, two used small groups and five varied group size depending on the specific activity. In none of the observed classes was instruction primarily individual.

Instructional Activities

Observations were conducted on the use and duration of warmups and whether games, team sports, individual sports or other activities were taught. Observers also described what they saw during the class period. Table 5. displays the results of the observations of warmups and types of activities based on the descriptors provided in the observation form.

Table 5. Types of Observed Activities and Their Duration

<u>Descriptor</u>	<u>No. classes</u>	<u>Duration (avg.)</u>
warmups (stretching, calis- thenics, jogging, etc.)	20	6.95 min. range= 0-14
games (dodgeball, foursquare, pinball, mushball, etc.)	3	28.33 min. range= 20-45
team sports (softball, soccer, etc.)	15	30.13 min. range= 20-40
individual sports (tennis, golf, etc.)	6	30 min. range= 25-30
fitness & other (aerobics, dance, free play, etc.)	4	32.5 min. range= 30-40

Twenty of the 30 classes observed conducted warmups on the day of the observation. In a few cases the teachers told the observers that they normally conducted warmups but circumstances prevented it on that day. One example of such a circumstance was that the gym had been used by a dance class during the previous period and the sound equipment had not been picked up. Team sports was the emphasis during the period of observation, with soccer and softball instruction dominating. As mentioned above, these were common curricular themes for spring. Six of the classes were teaching individual sports skills of one kind or another. One class was completing a unit on golf in which the students worked in small groups hitting golf balls toward simulated greens on the playground. Of the four classes observed to conduct "other" types of activities, three were focused on fitness, while one was given to free play. The amount of time spent on the main activity ranged from about 20 to about 45 minutes.

Instructional Orientation

In this section of the observation the observers focused on what took place in the class in terms of grouping for instruction, explaining to students, demonstrating techniques, providing feedback on performance and so on. Each observer watched the class and took notes on what s/he saw. A thorough review of observers' notes revealed common elements and

variations that combine to form a composite picture of the "typical" middle school physical education class.

Organization for instruction and instructional management was the most similar aspect of these classes. Each class began in a similar manner with roll taking, explanation of the day's activities and their relationship, if any, to previous days' lessons. Warmup activities were used in most classes and usually consisted of five to ten minutes of stretching and calisthenics. It was not uncommon for these activities to be led by a student. Grouping was observed to be a function of two factors, the type of activity inherent in the day's lesson and logistical considerations, such as equipment availability, space considerations and so forth. Some type of grouping was more common than whole class instruction. Where observation of individual performance was needed in order to provide instructional feedback, whole classes were too large for teachers to deal with. Team sports, obviously have their own groupings based on the number of players required to form a team.

The most common instructional technique consisted of demonstration followed by observation and feedback. While individuals were sometimes called out to for praise or correction, the message conveyed was almost always intended for the entire group or the class.

Discipline problems were minimal in the observed sessions. In one case a class was cut short because a few students repeatedly ignored safety rules with golf clubs, resulting in minor injuries to themselves or other students.

"Dressing down" or the required donning of appropriate apparel was universal. Conformity varied widely and teachers varied in how they dealt with infractions. In many cases no special mention was made of the fact that a student was in street clothes. In some cases they were barred from participation in the day's activities and in a few, special sanctions were imposed such as the requirement to write a five hundred word essay and turn it in to the P.E. teacher at the next class meeting.

Relationship to Fitness

At the end of each session the observer asked the teacher(s) "How would you relate today's activities to fitness?" The most common response related the warmups to fitness. Many of the teachers cited relationships between the class activities and aerobic fitness. Examples of this relationship included jogging, soccer, aerobic exercises, softball, hurdling, kickball and pinball. General fitness was cited in relationship to virtually every physical activity. Four of the teachers stated that there was no intended fitness objective in the day's lesson.

Fitness Testing Results

The evaluation plan called for the collection of fitness testing data from each of the middle schools. Survey data indicated that at least ten of the schools had conducted fitness testing using either the AAHPERD or the Fit-N-Dex. Unfortunately, attempts to collect these data from the schools were unsuccessful in all but a few cases, leaving the evaluator with no usable data. In some schools where the Fit-N-Dex was used, teachers, after using the data, sent individual student data home for parental review but did not keep a copy on file. In some other schools data were used onsite, then disposed of at year end. The net result of these practices was that at the end of the school year there were not enough schools using the same measure to make data aggregation across schools feasible. Therefore, a decision was made, in concert with the Curriculum Department, Superintendent and key board members to recruit a sample of middle schools to test children in February of 1988, using the Fit-N-Dex, and to report those results in a Phase two report in the Spring of 1988. The data will then provide a point in time estimate of the relative fitness of Portland middle school students.

DISCUSSION OF STUDY QUESTIONS AND RELATED FINDINGS

Thus far the results of this study have been presented in relation to the various data collection activities without reference to the evaluation questions. In this section of the report the results of all data collection efforts will be discussed in terms of the study questions. Each question will be presented followed by an analysis of the findings for that question. The study questions are of two types, those dealing with current status and those dealing with future policy.

Current Status

What are the curricular goals of the Physical Education program?

An interview with Mr. Don Bird, the Physical Education Curriculum Coordinator and a review of the K-8 Continuum for Physical Education (Curriculum Guide) provided the basis for answering this general study question. The interview focused on goals and expectations for the program and the use of the Curriculum Guide.

Mr. Bird provided three types of goal information for physical education, a list of Course Goals, a list of Program Goals and the Curriculum Department's Physical Education K-8 Continuum. These goals provide the general guidelines for the

program at the middle school. The Physical Education k-8 Continuum or Curriculum Guide contains more detailed goals and objectives for the purpose of planning class activities. This document was developed in 1977 for then Area I of the Portland Schools. It is partitioned into three sections by grade, k-2, 3-5, and 6-8. A set of six common categories provides the basis for the organization of each section. The six common categories of movement, fitness and body development, games and sports, gymnastics, rhythms, and personal and social development are further subdivided into components. Components vary by grade grouping and specific goal statements appear for each component. The index for each section (k-2, 3-5, 6-8) and a sample page from each section are shown in Appendix D. At the k-2 level components and goals are obviously based on developmental readiness. Lower level goals are reinforced in higher grades as higher level goals are introduced thus providing a continuum of development. For example, at kindergarten level a pupil would be expected to demonstrate a shoulder shrug and this would be reinforced at grades one and two, while a kindergarten goal of demonstrating a static pencil hang would be replaced at first grade with a more complicated pencil hang and chin down.

The six categories, according to Don Bird, are weighted equally. Teachers are expected to select activities that result in student growth in the specified goal areas. They are also expected to evaluate the effectiveness of the activities they choose and revise or replace them to get the optimal fit of activities with goals. Principals are expected to evaluate the P.E. instructors, in part, on the extent to which they use the continuum.

Ideally, principals should send the P.E. curriculum plans for their building to Don Bird at the beginning of the year. This plan includes information on what will be taught and when. It is not a detailed lesson plan. Mr. Bird reports that he does not receive plans from all middle schools.

It should be noted that while the course goals and program goals are consistent with one another, with the program level goals expanding on the course goals, the curriculum guide, developed in the mid 1970s bears a less direct relationship to either set of goals. While most, if not all, of the goals are represented in the curriculum guide, the relationship is not systematic.

To what extent do the goals address physical fitness?

Physical fitness has been identified as "the reason and justification for Physical education" (Johnson, 1985). One of the six equally weighted curriculum categories is "fitness and body development." This category has age appropriate objectives and attitudes at each level. The guide contains many examples of

activities under each category. Since it was developed in the 1970s it does not deal extensively with more current concepts of aerobic fitness, lifetime activities and developing a positive attitude toward fitness for life. Four of the eleven Program Goals specifically address fitness (goals 1,2, 5 and 7) while others address fitness in a more general way (6, 7 and 10). The program goals strike a balance across physical fitness and general health. They are also balanced in terms of cognitive knowledge and physical activity. In summary, they would seem to provide the basis for a strong program if used effectively. This study did not examine the extent to which lesson plans specifically address these goals or follow the continuum. A more narrowly focused, intensive study would be needed to answer questions regarding adherence to the goals and continuum.

Do the goals adequately address the physical education needs of children in the Portland Public Schools?

Much has been written in recent years about the physical education needs of children and the inadequacies of the American education system in responding to those needs. A commonly accepted standard for an appropriate level of physical activity for a physical education class was first cited by Jack Wilmore of the University of Arizona. Wilmore, cited in an article by Johnson (1985), identifies appropriate physical activity as

..."exercise which involves large muscle groups in dynamic movement for periods of 20 minutes or longer, three or more days per week, and which is performed at an intensity requiring 60 percent or greater of an individual's cardiorespiratory capacity".

This standard has been adopted by the American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD). According to Kneer(1987) exercise physiologists Plowman and Fall(1978) and Corbin and Lindsey(1985) have identified the following four needs that are appropriate focus areas for physical education programs:

- o development of sufficient strength to perform the expected tasks of living,
- o development of sufficient aerobic capacity to maintain cardio-respiratory efficiency,
- o development of sufficient flexibility and abdominal strength to avoid the debilitating effects of the common lower back injuries, and
- o maintain appropriate levels of body fat.

Portland middle school principals identified a wide range of student needs that should be served by physical education. Although there was no clearly dominant need identified, the most

commonly cited needs were for lifetime skills, fitness, recreation and social, attitudes and self esteem and physical activity. Most principals felt their programs provided an adequate emphasis on fitness especially long-term fitness and lifetime sports.

Portland middle school physical education teachers, responding to our survey, indicated that the PPS curriculum tended to underemphasize fitness. They cited a need for year-long programs, better communication and articulation with lower grades and revision of the curriculum guide to reflect more modern fitness concepts.

The physical education needs of Portland students can be viewed to some extent as an extrapolation of the needs of American school-age children in general. The National Children's Youth Fitness Study (NCYFS), a nationwide study of the physical fitness of America's youth was conducted in the spring of 1984 to ascertain the fitness level of school children in the fifth through twelfth grades (Ross, J.G. and Gilbert, G.G., 1985). This study examined the status of physical education and the general fitness of school children in grades five through twelve. The results of the study can provide the basis for ascertaining physical education needs, nationwide. The NCYFS sought to describe the fitness status of American children and youth, to describe patterns of participation in physical activity, and to evaluate the relationships among physical activity patterns and measured fitness. On the basic question of fitness, the study asked "what level of performance must a student of a given grade and sex achieve on a fitness test in order to be considered in optimal, acceptable or average physical condition?" The study asked many other questions about physical activity patterns, physical education enrollment, instructional time in physical education and relative emphasis on lifetime activities as a means of attaining fitness.

The NCYFS found that nationwide, over 80 percent of students in grades five through twelve were enrolled in physical education courses. The number of weekly class meetings averaged 3.6, with an average class length of 46.7 minutes. Slightly less than half the instructional time was spent on lifetime activities. Enrollment in P.E. tapered off from 97 percent in grades five and six to slightly less than 50 percent in the twelfth grade. The typical student was found to spend the largest proportion of time on five activities in descending rank order: basketball, calisthenics, volleyball, baseball/softball and jogging. This study found that for older students the physical education programs nationally, tend to rely heavily on competitive sports and other activities that cannot easily be continued throughout adulthood.

The NCYFS revealed that approximately half of boys and girls

in grades five through twelve are achieving at least the minimum weekly requirement for fitness as stated by Wilmore when out of class activities are included. The study found three factors to significantly affect youth fitness: year-round appropriate physical activity, enrollment in physical education and physical activity in other settings. Fitness was found to be strongly related to the number of physical activities and the number of community organizations with which a child was involved in those activities.

In summary, it appears that several physical education needs have emerged nationally, that are also PPS needs. Although our students, typically receive an adequate amount of instruction during the year, it would be difficult to say that the physical education program is providing them sufficient opportunity to experience the 20 minute, three day a week minimum standard for fitness throughout the year. Therefore, there may be a need to examine ways to increase the amount of rigorous exercise time included in the program. There are obstacles to effecting such an increase, however, in terms of the amount of instructional time available for P.E. and the need to schedule classes on a half year or semester basis. If changes in curriculum goals are considered appropriate they should focus on increasing the emphasis on fitness.

What is the current physical education instructional program in terms of the curriculum and extracurricular activities?

- What is being taught and to whom is it being taught?

- What extracurricular programs are available and to whom are they available?

Results of the principals interviews indicate that the principals feel that the P.E. Curriculum Guide is being used in a variety of ways with numerous qualifying conditions. Several of the principals reported that it was used "only as a guide" and not strictly adhered to. Therefore the extent to which the goals and activities in the guide are covered through instruction is unclear. The most frequently mentioned curricular emphasis was lifetime skills. Fitness - especially cardiovascular fitness was mentioned as a focal point as was social interaction and recreation.

Classroom observations revealed an emphasis on team sports such as soccer, softball, volleyball, etc. during the observation period in the late spring, with 15 classes engaged in these activities. Individual or lifetime sports were the second most frequently observed activities, with six classes teaching them. Three classes were engaged in team games such as dodgeball, pinball and mushball. Three were observed to be involved in

fitness, dance or free play. One of these was having a once weekly fitness session. While these results are somewhat inconsistent with the principal interviews and the teacher survey results, it must be acknowledged that a cross-sectional observation, conducted at one point in time during the school year would not be expected to yield a representative sample of the full curriculum.

Extracurricular programs in the form of extramural activities were found to be operating in nine of the middle schools. These nine programs, representing one-half of the middle schools, were staffed by P.E. teachers from within the school (n=6) and by external volunteers (n=5). Twelve schools reported having an intramural program. All 12 of these included basketball in their program, seven had track, field or cross country running, while five each had volleyball and gym hockey. A variety of other sports was represented by one or more of these programs.

There was no indication that any of these intramural or extramural activities was restricted to any special segment of the population. Some sports activities are restricted for safety reasons to students who meet certain physical qualifications. For example, to play middle school football the Portland Youth Football Association requires that a child weigh a minimum of 75 pounds and not exceed 150 pounds.

How consistent and effective is the Physical Education program in meeting its goals and serving children's needs?

The answer to this question must be inferred from principal interviews and teacher survey data. As was stated above, a wide variety of needs were identified by principals and teachers responding to the interviews and survey. Principals and teachers obviously feel that their programs are addressing the needs of students, as they understand them, and within the limits set by the curriculum. A definitive answer to the question of effectiveness in meeting goals would require comprehensive, district-wide knowledge and fitness testing to ascertain the level of student mastery of the goals. Attempts to collect districtwide performance data on fitness tests were unsuccessful because of the wide variety of fitness testing methods used and the lack of availability of data for group analysis. Any future studies of physical education in the Portland Schools should focus on systematic collection of fitness data.

How is physical fitness within the program being measured and monitored?

A variety of approaches are being used to measure and monitor physical fitness. The teacher survey revealed AAHPERD test and the Fit-N-Dex were each in use by five middle schools,

while five others used some other type of measure. Data were not collected by the remaining three schools. Attempts to collect student fitness data from the schools on these measures was unsuccessful for a variety of reasons. First, since the P.E teachers didn't expect to be required to turn in such data, those using the Fit-N-Dex, sent computer printouts home with the children for their parents to review but, in only one case did the school keep copies for their own records. Second, those using other tests such as the AAHPERD were not able to provide consistent records that lent themselves to cross building summarization. Third, a few schools have developed their own systems for measuring and reporting fitness which are unique to the school and therefore not aggregatable with results from other schools.

A brief description of what each of the most commonly used fitness tests measures will help to reveal the range of performance covered by the tests and provide the reader with a better understanding of what is measured and how.

The AAHPERD Health Related Physical Fitness Test as revised in 1978, contains four measures intended to assess status on three components of physical fitness. As indicated in the test manual (AAHPERD, 1980), the components and test items are:

- 1.) Cardiorespiratory function
 - a. Mile run or nine minute run
 - b. (one and one-half mile run or 12 minute run are optional for students 13 years or older.)
- 2.) Body composition (leanness/fatness)
 - a. Sum of triceps and subscapular skinfolds
 - b. (Triceps skinfold is optional is optional if only one site is selected.)
- 3.) Abdominal and low back-hamstring musculoskeletal function
 - a. Modified, timed situps
 - b. Sit and reach

The measures and components were selected as operational definitions of fitness conforming to three criteria established by an AAHPERD study committee. The criteria are:

- 1.) a physical fitness test should measure a wide range which extends from severely limiting dysfunction to high level of functional capacity;
- 2.) it should measure capacities that can be improved with appropriate physical activity; and
- 3.) it should accurately reflect an individual's physical fitness status as well as changes in functional capacity by corresponding test scores and changes in those scores (AAHPERD, 1980).

The Cramer Fit-N-Dex (Thomas, ca.1985) measures three of the same fitness components as the AAHPERD test - body composition, cardiorespiratory endurance and low back and hamstring

flexibility plus a fourth component, strength. The items used for the first three are the same as for the AAHPERD, except that the modified situp is not used. Instead, the sit-up is used along with the flexed-arm-hang as a measure of strength. The major difference between the two tests seems to be the use of a microcomputer with the Fit-N-Dex to provide norm-referenced individual student profiles and class summaries. Data are entered on each child at the time of testing and individual reports can be provided by class. The advantages of this system lie in the time savings to the teacher for record keeping and the ability to generate summary level information on a publisher's norm base. An example of a student profile from the Fit-N-Dex is shown in appendix E.

Schools not using one or the other of these two measures are likely to be using a method of their own. One example of such a method is that used at Gregory Heights. This school has developed its own physical education program in which each student sets his/her own goals and works on a contract basis with the instructor to reach those goals. Periodic fitness tests are used to measure improvement toward the desired goals. The areas measured are Cardiovascular (12 minute run and step test), muscular endurance (rope climb, half sit-ups, push-ups and chin-ups), Flexibility (sit and reach and arm and shoulder reach) and Other (vertical jump, agility run, standing broad jump and 440 yard dash). Scores on these activities are used to construct a "Body Profile" for each student. The student identifies areas in which s/he needs further improvement based on the profile. An example of a Body Profile sheet can also be found in appendix E.

Is the current method of measuring and monitoring physical fitness effective and satisfactory?

The current methods of measuring and monitoring as described above are adequate, in most cases, for providing information to teachers and students on the status of fitness and to some extent the effectiveness of instruction. It is obvious, however that the lack of a standard approach precludes any districtwide assessment of fitness status or improvement over time. This is mostly because the two major measures each have separate non-comparable norms. Don Bird introduced the Cramer Fit-N-Dex as a means of getting reliable, norm-referenced data on each child with a minimum of paperwork. At this point in time, however, it has not been widely adopted. Teachers using the Fit-N-Dex seem to be quite satisfied with it however.

Future Policy

Should there be a measurable districtwide standard for physical fitness?

Twelve of the 15 schools responding to the teacher survey

indicated support for a district-wide standard for fitness. Of 10 who took the time to comment, nine were positive. Comments from the teachers indicated an interest in improving accountability for fitness and taking more responsibility for youth fitness. If it were left entirely to the teachers a fitness standard would be established and measurement would be standardized.

What is the best way to monitor attainment of fitness goals district-wide?

The physical education teachers themselves, the p.e. coordinator and the literature provide some basis for answering this question. The ultimate answer, however, must take into account the burden on the teacher and student as well as the ultimate purpose of the monitoring and the quality of available measures in terms of their appropriateness, reliability and validity.

Judging by the level of support indicated in teacher responses, a standardized performance measure such as the AAHPERD or the Fit-N-Dex would seem to fit the needs of most teachers and provide the district with necessary summary data. The AAHPERD, re-normed and revised in 1978-80 does not provide data that are as current as does the Fit-N-Dex. Moreover, the Fit-N-Dex offers the added advantage of onsite, quick turnaround report generation for use by teachers and students. Unfortunately, reliability and validity data were not readily available to the evaluators for either of these tests, therefore technical comparisons are not possible at this time. There is an added advantage however, to use of the Fit-N-Dex in the capability of developing a local norm base from the data captured by the computer. This would also be possible with the AAHPERD, but would require considerably more effort since the data would have to be batched and entered into a computer database separately for each class and school therefore requiring longer throughput time and involving more resources. A quick search of the literature on educational measurement failed to reveal any competitors for these two tests. In summary, the Fit-N-Dex seems to have more to offer for the Portland district.

Should the Board of Education set district-wide fitness goals?

Physical fitness is a key dimension of the quality of life. Every U.S. president since Eisenhower has recognized the need to improve the fitness of american youth and has provided support through the Presidential Council on Fitness to promote and encourage youth fitness programs through schools and community agencies. Physical fitness is generally recognized as an underpinning of mental and emotional fitness. The question of whether the Board of Education should set fitness goals for the district is a question of educational philosophy as it relates to policy. In part, the answer depends on how the role of the

school is defined. Should that role be confined to the imparting of skills and knowledge that are more traditionally academic or should, resources permitting, that role be extended to include other skills and knowledge that contribute to the effective functioning of the total individual in society? To the extent that one accepts the latter as the legitimate role of the school then it must follow that it is reasonable to set physical fitness goals for the district. The more pertinent question then becomes "what kinds of goals should be set?".

The fitness measures now in use have both criterion referenced and norm referenced uses. For example, AAHPERD recommends that scores below the 25th percentile on any item be rated as "unacceptable", thereby providing the basis for remediation by the student and instructor. Such recommended standards are commonly included with performance measures to assist teachers in proper use of the tests. Generally speaking, goals that call for continued improvement make more sense than those that set static or arbitrary standards for achievement, since some growth is possible for everyone, whereas static standards that are attainable by all are likely to be trivial and those that are attainable by only a few are by their nature, discriminatory. Meaningful goals are also measurable goals, therefore a general goal of the type - "Students in grades six through eight will show continued improvement in the percentage of students exceeding the minimum standards established for fitness as measured by the XYZ fitness test" - can be useful in focusing attention on the need to seek continued improvements in fitness. This type of relative growth goal may be useful in providing a stimulus for improved fitness among PPS students.

CONCLUSIONS

This study examined a broad range of questions related to the status of physical education in the PPS middle schools, using an eclectic research strategy designed to match research methods with questions and issues in the most effective manner. The results reveal both strengths and weaknesses in the physical education program, providing the basis for some improvements that could lead to increased attention to fitness.

The findings suggest four major conclusions. First, and perhaps most obvious, is that the curriculum guide, Physical Education K-8 Continuum, is in need of revision to bring it up to date and make it more congruent with the established course and program level goals. The guide, developed in the mid 1970s, does not reflect the same balance of fitness, lifetime and team sports skills embodied in the more recently developed course and program goals.

Second, it was apparent from principal interviews and teacher survey information and was supported by document review,

that the physical education and health education curricula are not consciously coordinated so as to reinforce one another. In one middle school these subjects are taught by the same staff, providing an opportunity to treat fitness and health in a more systematic and integrated fashion. Further study of this approach could provide information useful in developing a more articulated curriculum bridging the two subject areas.

Third, given the limitations of space, staff, schedule constraints and the need for changes recommended above, the middle schools are doing an admirable job of serving the fitness needs of students while attempting to provide a broad range of activities. The Oregon Department of Education recommends that eight percent of the total available instructional time be allocated to physical education. In general, our middle schools are meeting this recommendation commendably. In an idealized situation, students would receive physical education all year long, instead of one semester a year, thereby providing sufficient opportunity to experience the recommended minimum amount of exercise for maintaining fitness. However, serious obstacles to this exist in the need to allocate teachers to schools in an efficient manner. Combining physical education with health education might help in solving this problem, but it would create another problem in that it would necessitate that all teachers in one subject carry an endorsement in the other as well. This problem requires further study.

Fourth, PPS does not currently have in place a systematic fitness testing program that will provide data for monitoring the physical fitness status of our students. If there is to be a set of districtwide standards developed for the fitness of our students then a measuring and monitoring system is obviously needed to provide the data required to enable teachers and principals to assure the effectiveness of the program.

RECOMMENDATIONS

Based on the findings and the conclusions discussed in this report the following recommendations are proffered for consideration. They are listed here in no particular order of importance.

- 1.) The curriculum guide, Physical Education K-8 Continuum, should be reviewed by the Curriculum Department for the purpose of deciding whether to revise it or not. Any revision should seek to attain better alignment with the course and program level goals.
- 2.) The Board of Education should give serious consideration to establishing a physical fitness achievement goal for the district. Such a goal would establish physical fitness as an educational priority

and provide the basis for needed curricular and other changes. It would also communicate to the administrators, teachers, students and community that Portland Public Schools is committed to developing healthy, physically fit citizens.

- 3.) The Curriculum Department should adopt a standardized fitness testing program using the Cramer Fit-N-Dex. The testing schedule and other administrative details should be determined only after discussions have been held with the physical education teachers and Don Bird to review needs and use for the data. The Evaluation Department should provide consultation assistance to this process.
- 4.) The Curriculum Department should study ways of improving the articulation of health and physical education. The current system of teaching these two subjects independently fails to adequately emphasize the role of fitness in maintaining a healthy body and mind and the link between general fitness and a happy well adjusted life style.
- 5.) The appropriate district administrators should examine the feasibility of a year-long physical education program for middle school students. Such a program would have the advantage of enabling teachers to offer a wide range of activities and provide fitness training over a longer period of time, thereby increasing the probability that skills, attitudes and knowledge acquired would transfer to a child's everyday life. This recommendation should be considered in conjunction with recommendation four to see if the integration of health, fitness and physical education can somehow facilitate the development of a year-long comprehensive program.

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Appendix A
Data Collection Plan

PHYSICAL EDUCATION NEEDS ASSESSMENT

Study Plan

December 1, 1986

Joe B. Hansen

Study Questions:

1.0 Current Status

- 1.1 What are the curricular goals of the Physical Education program?
- 1.2 To what extent do the goals address physical fitness?
- 1.3 Do the goals adequately address the physical education needs of children in the Portland Public Schools?
- 1.4 What is the current physical education instructional program in terms of curriculum and extracurricular activities?
 - 1.4.1 What is being taught and to whom is it being taught?
 - 1.4.2 What extracurricular programs are available and to whom are they available?
- 1.5 How consistent and effective is the Physical Education program in meeting its goals and serving children's needs?
- 1.6 How is individual student fitness within the program being measured and monitored?
- 1.7 Is the current method of monitoring fitness effective and satisfactory?

2.0 Future Policy

- 2.1 Should there be a measurable district-wide standard for physical fitness?
- 2.2 What is the best way to monitor attainment of fitness goals district-wide?
- 2.3 Should the Board of Education set district-wide fitness goals?

Physical Education Assessment

<u>Data Sources</u>	<u>Methods/Activities</u>
1.1 Curriculum Department	document review of P.E. curriculum documents. interview with Don Bird
1.2 Curriculum Department	document analysis
1.3 Curriculum Dept., parents, national studies	document analysis, focus group, literature review
1.4 Principals, P.E. teachers	interviews, survey, classroom observation
1.5 Principals, P.E. teachers, parents	interviews, focus groups
1.6 Principals, P.E. teachers P.E. Coordinator	interviews, observation
1.7 Principals, P.E. teachers, Fitness test	interviews, observation, P.E. instrument review
2.1 P.E teachers, parents, administrators, Board of Education	interview and survey, focus group, focus group, discussion
2.2 P.E. teachers; P.E coordinator, literature	focus group, interview, lit.review
2.3 Board of Education	review and discussion

Appendix B

Data Collection Instruments

- o Principal Interview Guide
- o Teacher Survey Questionnaire
- o Observation Guide

Physical Education Assessment

Principal's Interview Guide

A. Instructions to Interviewer:

1. Call the Principal and schedule the interview for a time that is mutually convenient. Explain that the purpose of the interview is to collect information that will help the Research and Evaluation Department to respond to a request from the Board and the Curriculum Department for a study to guide policy development for Physical Education instruction in the Portland Schools.
2. Inform the Principal that the interview will take no longer than 30 minutes, will not be recorded and - will be absolutely confidential.
3. A brief summary of the Principal interview results will be made available within two weeks of the completion of the interviews. Copies will be mailed to all participants.

B. The Interview

The following questions provide a general framework for the interview. Try to ask the questions in a conversational manner, rather than in a rigid, lock-step fashion. Watch for information in one response that might be pertinent to another question. If in answering one question, the Principal provides you with the answer to another question, then you should not ask the second question, but make a note in the answer space referring to the first question.

1. Instructional Time

What are your thoughts about the amount of instructional time allocated to Physical Education in your school: about right, too much or too little?

Possible probes:

Do you allocate more than the state and county recommendation of eight percent of the total instructional time? If so, would you mind sharing with me, why you provide more P.E. instruction time.

Is P.E. required for full year or on a semester basis?

If you had more space available for Physical Education, would you offer more classes or extend the program for a full year?

2. Pupil - Teacher Ratio

Is the approximate pupil-teacher ratio in P.E. in your school appropriate for what you want to accomplish?

3. Combined Classes

What do you think about combining students from different grades in P.E. classes? What are the benefits and the disadvantages to the children?

Which combinations, if any do you have?

Are boys and girls taught at the same time in the same class?

4. Curriculum

How is the Physical Education Curriculum used in your school?

What are the strengths and weaknesses of the P.E. Curriculum Guide, as you see them? (Look for evidence of a plan from P.E. Coordinator in school.)

5. Fitness and Development

In your school what is the relative emphasis of the P.E. program on such things as - team sports, cooperative games, recreation, lifetime sports, health, long-term fitness? Do you feel there is adequate emphasis given to fitness?

6. Program Articulation

How does P.E. articulate with Health?

How is P.E. at sixth grade articulated with P.E. at fifth grade?

7. Student Needs

In your opinion, what are the the most important student needs the Physical Education program should address?

8. Changes Needed

What if anything would you like to see changed regarding the P.E. program at the district level?

9. Parent Involvement

One of the sources of information we are considering in this study is parents. If we were to conduct a single districtwide discussion session focusing on parental interests regarding Physical Education, would you be willing to announce the discussion at a meeting of your LCAC and invite interested parents to attend?

(Thank Principal for cooperating and for taking the time to help us develop information that will guide future policy in Physical Education in the Portland Public Schools.)

March 3, 1987

M E M O R A N D U M

TO: All Middle School Physical Education Teachers

FROM: Joe B. Hansen

SUBJECT: District-wide study of Physical Education

The Research and Evaluation Department, at the request of the Curriculum Department, is conducting a district-wide study of the current status and needs of the Physical Education program in the Portland Public Schools. The results of this study will be used to inform district policy regarding Physical Education curriculum and instruction. The data collection will involve a variety of activities including interviews with principals, a teacher survey, discussions with parents, classroom observations, document review and selected teacher interviews. The enclosed questionnaire is the instrument for the teacher survey. In order to have the information we need to report to the Board of Education in April we must have your questionnaire completed and returned by March 20th. All responses will remain anonymous and strictly confidential. Your cooperation will help to guarantee broad representation and validity. Your assistance will be greatly appreciated.

Please send your completed questionnaire to :

Joe Hansen
Research and Evaluation Department
Blanchard Education Service Center

If you have any questions regarding this survey or the district-wide study please call me at ext.257.

Thank you for your assistance.

Physical Fitness Needs Survey

The Portland Public Schools Research and Evaluation Department, under the guidance of the Curriculum Department, is conducting this district-wide survey of Middle School Physical Education teachers in order to inform district policy regarding physical education. We would greatly appreciate your taking the time to answer the following questions. All responses will be absolutely confidential and your anonymity guaranteed. Please return the survey to the Evaluation Department via the Pony, no later than March 20th 1987.

1. The following categories of activities are taken from the Physical Education Curriculum Guide for grades 6 through 8. Please indicate the approximate percentage of your total instructional time you devote to each activity area. Use 100% as your basis for assigning percentages of time to each category so that when you are finished the values will add up to 100. There is no prescribed allocation or "correct" answer. By collecting this information we hope to develop a composite picture of Physical Education in our middle schools.

Physical Education Index of Categories and Components Grades 6-8

<u>Category</u>	<u>Component</u>	<u>Percent Time</u>
MOVEMENT	Locomotor	_____
	Non-locomotor	_____
FITNESS AND BODY DEVELOPMENT	Arm and shoulder development	_____
	Trunk development	_____
	Leg development	_____
	Total body development	_____
GAMES AND SPORTS	Basic game and sport skills	_____
	Relays	_____
	Team sports	_____
	Individual and recreational	_____

GYMNASTICS	Safety	_____
	Tumbling	_____
	Stunts	_____
	Apparatus	_____
RHYTHMS	Foundation skills	_____
	Dance	_____
PERSONAL AND SOCIAL DEVELOPMENT	Sportsmanship	_____
	Personal hygiene	_____
OTHER	_____	_____
(Please describe)	_____	_____
	_____	_____
	Total	100%

2. In your view, does the PPS Curriculum Guide for Physical Education adequately emphasize the fitness needs of children?

- a. curriculum underemphasizes fitness _____
- b. curriculum emphasizes fitness just enough _____
- c. curriculum overemphasizes fitness _____

If you marked a. or c. please explain. Do you have specific suggestions for improving the Curriculum Guide?

3. In what ways do you incorporate physical fitness instruction into your program? For example, do you have specific goals for fitness? If so, please provide an example or two. Do you plan specific activities focusing on fitness? If so, please provide an example or two.

Fitness goals:

Fitness activities:

In general, how do you deal with fitness in your classes?

4. Is Physical Education articulated in any way with the Health curriculum in your school?

Yes, P.E. is articulated with Health. _____

No, P.E. is not articulated with health. _____

If you answered "yes", please explain.

5. Do you currently have an intramural activities program in your school?

Yes, we have an intramural program ____.

No, we do not have an intramural program ____.

If you answered "yes", what schedule are you on, "A" or "B"?

Schedule A ____

Schedule B ____

What activities do you have in your intramural program?
(Please list activities.)

6. Do you currently have an extramural activities program (involving other schools)?

Yes ____

No ____

If you answered "yes", who conducts this program?

a. A person from outside the school ____.

b. A P.E. teacher from the school ____.

If you answered "A", does this person receive extended responsibility pay?

Yes ____

No ____

7. In your opinion, should the District have a measurable district-wide standard for physical fitness?

Yes ____ No ____

Please comment on your answer.

8. What method is used for measuring or monitoring fitness in your school?

a. The AAPHERD test ____.

b. The Fit N Dex ____.

c. Other ____.

If you marked "other" please describe or identify the measure or process used.

9. Are fitness tests given:

a. Once a year in the Spring ____; in the Fall ____.

b. Twice a year ____.

c. Periodically throughout the year ____.

10. Please use the space below for any additional comments you would like to make regarding the Physical Education program in your school.

Thank you for taking the time from your busy schedule to complete this questionnaire. Please return it, via the Pony, to:

Joe Hansen, Research and Evaluation Department
Blanchard Education Service Center (ext. 257).

Physical Education Observation Guide

Observer Directions:

Introduce yourself to the P. E. teacher as _____ from the Research and Evaluation Department. Explain that you are here as part of a districtwide study of the Physical Education program. The study is being conducted at the request of the Board of Education. [Results will be useful to the Curriculum department, Superintendent and Board in deciding whether P.E. curriculum needs revision or not and if so, how it might be revised.] The data being collected include Principal interviews, teacher surveys and onsite observations. Individual class data will be kept strictly confidential and anonymous. The results will not be used in any way for teacher performance evaluation. All participants will be provided with a summary of the results.

Explain that you will be observing one class for each P.E. teacher in this school. Show her/him the observation guide and ask if there are any questions you can answer before you begin.

Once you are satisfied that the teacher is comfortable with the situation proceed by asking him/her the following questions to provide context for the observation.

Questions

- 1.a. How many times a week does this class meet? _____
 - b. What is the length of the class period (minutes)? _____
 - c. How many students are there in the class? _____
 - d. What grade level(s) are in the class? (circle) 5 6 7 8
 - e. How many certified teachers are there teaching the class? _____
 - f. How many instructional aides are there for the class? _____
-
- 2.a. What are you planning to do with this class today? What objectives or goals, if any, will you be working on?
-
- b. Are today's activities related in any specific way to school-wide activities or district emphases (e.g. field day, gym fest, fitness week, etc.?)

Thank the teacher for permitting you to observe the class. Mention that there will be one or two followup questions at the end of the period.

Observations

1. Setting:

indoor

_____ gym

_____ other (describe)

outdoor

_____ playground

_____ athletic field

_____ other (describe)

2. Teaching stations:

How many _____

Purpose of each: (List and describe briefly)

3. Instructional Group size (check one for each type observed)

_____ large ($n > 25$)

_____ medium ($25 > n > 15$)

_____ small ($n < 15$)

_____ individual

4. Activity: Describe what the class is like, using the descriptors below. Indicate group size if multiple groups are used.

Warm-ups (identify each e.g. stretching, situps, jumping jacks, etc.)

duration in minutes (all exercises combined)

n= _____

Game(s) (describe)

duration in minutes:

n= _____

Team sports (identify or describe)

duration in minutes:

n= _____

Individual sport (identify or describe)

duration in minutes

n= _____

Other (e.g. dance, fitness assessment, etc. - describe)

Write description here.

5. Instructional orientation:
In your own words describe how instruction is conducted.
Consider things such as grouping, explaining, demonstrating,
providing feedback, etc.

6. Post observation interview question:
How would you relate today's activities to fitness? There
doesn't have to be any direct relationship, but if you see one
please tell me about it.

7. Additional comments - attach a separate page if needed.

Appendix C
Teacher Survey Comments

PHYSICAL FITNESS NEEDS SURVEY

Question 2.

In your view, does the PPS Curriculum Guide for Physical Education adequately emphasize the fitness needs of children?

- a. 9 - curriculum underemphasizes fitness
- b. 6 - curriculum emphasizes fitness just enough
- c. 0 - curriculum overemphasizes fitness

Specific suggestions for improving the Curriculum Guide:

Include suggested exercises/calisthenics
Include specific stretches - perhaps wall-mountable materials
Curriculum should include cardiovascular fitness and flexibility skills. Lack of flexibility is related to back injury in adults.
The guide needs to address aerobic/cardiovascular fitness. We should also include, address, lifetime activities in the guide.
I feel it needs to stress fitness development in every activity that is presented - possibly state it within each section so it is emphasized.
Incorporate activities that improve fitness, but utility minimum gym space.
More specific information.
It's too general. Need more activities that you can do for each age group to meet all their fitness needs. Need to make sure the scope's sequence is followed at all levels.

(Frequency): 4 - Include specific exercises
 3 - Stress fitness Development
 2 - Cardiovascular Fitness
 1 - Include lifetime activities

Question 3.

Fitness Goals:

Maintenance of fitness level. Discuss heart rates/pacing during track unit
85% elite. Improving/a weakness
Increase aerobic capacity. Engage in 10 minutes of aerobic activity 3 times per week. Increase to 15 minutes as endurance improves.
Understand how to develop cardiovascular endurance,

strength and flexibility. Learn and practice a variety of activities to achieve to 3 components. My program primarily deals every day with upper body strength (push-ups) sit-ups, and flexibility. We jog every day for 3 minutes.

To improve cardiovascular fitness.

To increase upper body strength.

To increase student knowledge of personal fitness.

Increase strength, flexibility and cardiovascular endurance - reaching and knowing what target heart rate and maintenance for 15-30 minutes.

90% of the students will show me that they can run 1/4 of a mile, do 10 pushups and pass the majority of the activities on the AAPHER test.

Cardiovascular fitness, i.e., jogging, to be used by students during field day - their goal.

Improve cardiovascular fitness.

Comes under Physical development - emphasis on heart, lungs, muscles, good posture, strength, endurance, power, speed, agility, balance, flexibility, relaxation.

To improve upper body strength.

To show improvement on Cramer Fit-n-Dex.

For students to understand the importance of good fitness.

Physical activities/fitness.

Social Fitness.

Knowledge of aerobics, heart rate, pulse taking, warm-up and warm down, the need for 3 times a week aerobic conditioning of various types.

- (Frequency):
- 7 - Increase cardiovascular endurance/fitness.
 - 4 - Upper body strengths.
 - 3 - Maintenance of fitness level.
 - 2 - Increase aerobic capacity.
 - 2 - To increase student knowledge of personal fitness.
 - 2 - Jogging
 - 1 - Improve a weakness.
 - 1 - Pass AAPHERD test.
 - 1 - To show improvement on Cramer Fit-n-Dex
 - 1 - Social Fitness

Fitness Activities:

Daily jogging or jump rope.

Daily exercises/pushups and situps (2 sets for 10-15 seconds)

10 Minute run.

Circuit training.
 Interval training (running).
 Aerobics (Dance, etc.).
 Jogging - length increases as endurance improves.
 Indy 500 (aerobic activity covering approximately 20 minutes).
 We spend every Tuesday and Thursday on fitness activities incorporating a variety of activities jogging, weight training, gymnastics, jump rope, circuits, etc.
 Six minute run/walk to music, practice taking heart rate before and after. Do this once every 2 weeks.
 Rope climb/flexed arm hang for time; do this once every two weeks.
 Circuit stations: flexibility, pull-ups, rope climb, jump rope, sprints, sit-ups, push-ups.
 Aerobic dance/fitness.
 Games that require movement of 15 minutes or more.
 Specific strength exercises (daily) - continuous lectures/discussions.
 Fitness unit - emphasizing strength exercises for abdominals, arms and legs, using weights, calisthenics, fitness circuits.
 Emphasize cardiovascular endurance - individual goals set for running - laps, time running with alternate stopping, jump roping, fitness circuit - working on cardiovascular.
 If my students are participating like they should they are meeting my behavioral objectives for fitness.
 Jogging, windsprints, various fast-paced games, obstacle courses, sit-ups/crunches, push-ups, treadmills, jumping jacks.
 Push-ups, striders, jumping jacks, step-ups, jump and reach, sit-ups, hurdle stretch, line touch, leg lifts, laps.
 Plan two days of aerobic activities for students who have acceptable fitness and four days for improvement.
 Unit on testing.
 Daily routine of exercises.
 Running activities.
 Cramer Fit-n-Dex.
 Monitor heart rate.
 Work with weights and various fitness equipment.
 Circuit training.
 Track and field.
 Fitness testing pre and post.
 Running/jogging/walking.
 Aerobic dance.
 Jump roping.

(Frequency):

- 5 - Jogging
- 5 - Jump rope
- 5 - Circuit Training
- 5 - Aerobics - dance/fitness
- 5 - Running
- 4 - Specific strength exercises
- 3 - Weight training
- 3 - Sit-ups
- 3 - Push-ups
- 2 - Running
- 2 - Rope climb
- 2 - Sprints
- 2 - Games that are fast-paced
- 2 - Cardiovascular endurance
- 2 - Jumping jacks
- 2 - Unit on testing

In general, how do you deal with fitness in your classes?

Stretching - 2 minutes, Exercises - 4 minutes

Jogging - 3-5 minutes

Fitness is addressed early as students learn how to achieve an aerobic effect and is on-going through the semester.

Twice a week.

On a consistent day-to-day basis.

Strength exercises, stretching prior to activity.

Fitness unit for all P. E. students.

Do a fitness unit for 2 weeks - to talk about and work on all specific components of fitness. Aerobics unit, with lifting unit. Ten minutes of warm-up at beginning of each class. Talk and work on fitness needs for each unit, other than the basketball, volleyball, soccer, etc.

Exercises at start of class.

Five minute exercise every day.

Each period there is an exercise period and some running of laps.

At least one day per week is for fitness development.

Scheduled into our lessons on Monday, Wednesday and Fridays. Spend time warming up, doing aerobic activity, taking pulse and warming down.

(Frequency):

- 6 - Daily warm-ups/exercises.
- 2 - Ongoing through semester.
- 2 - Fitness Unit.
- 1 - Twice a week.
- 1 - At least one day a week is for fitness development.
- 1 - Aerobics Unit.

Question 4.

Is Physical Education articulated in any way with the Health curriculum in your school?

- 8 Yes, P. E. is articulated with Health.
6 No, P. E. is not articulated with Health.

If you answered yes, please explain:

We are concerned with cardiovascular and muscular endurance. Heart rate taking.
Heart and Muscle Lab begins each semester to acquaint students with basic body mechanics and fitness needs.
We incorporate concepts of understanding the effects of good or poor fitness on your health as well as dealing with stress and practicing relaxation techniques.
Primarily in the area of fitness. I and health instructor discuss what we are teaching as not to duplicate, but rather to reinforce or introduce.
Subjects include muscle/cardiovascular fitness.
One quarter of health and 3 quarters of P. E.
Second period P. E. is a wellness class (co-ed).
P. E. instructors are also the health instructors.
Health units are used in P. E. class.
We're currently working on making it more articulated.

- (Frequency):
- 4 - Concerned with Cardiovascular/muscular fitness.
 - 3 - Health units are used in P. E. class.
 - 2 - Primarily in area of fitness.
 - 1 - P. E. instructors are also health instructors.
 - 1 - One quarter health/three quarters of P. E.

Question 5.

Do you currently have an intramural activities program in your school?

- 12 - Yes, we have an intramural program.
3 - No, we do not have an intramural program.

If you answered "yes", what schedule are you on, "A" or "B"?

Schedule A	<u>8</u>
Schedule B	<u>2</u>

What activities do you have in your intramural program?

12	- Basketball
5	- Volleyball
5	- Gym Hockey
4	- Track and Field
3	- Cross Country
3	- Team Handball
2	- Wall Ball
2	- Paddle Ball
2	- Gymnastics/Tumbling
2	- Archery
2	- Open Gym - Individual Activities
2	- Badminton
1	- Ping Pong
1	- Wiffleball
1	- Apparatus
1	- Wrestling
1	- Dance Team Clinics
1	- Softball
1	- Bowling
1	- Football
1	- 4-Square
1	- Weight Training
1	- Soccer

Question 6.

Do you currently have an extramural activities program (involving other schools)?

9	- Yes
<u>5</u>	- No

If you answered "yes", who conducts this program?

6	- a.	A person from outside the school
<u>5</u>	- b.	A P. E. teacher from the school.
<u>1</u>	-	No one oversees the entire program. Each sport is looked at independently.

If you answered "A", does this person receive extended responsibility pay?

3 - Yes
6 - No

Question 7.

In your opinion, should the District have a measurable district-wide standard for physical fitness?

12 - Yes
3 - No

Please comment on your answer.

- We should adopt a test and stick with it.
- We do not need to set up norms for our district - use norms set up by Cramer Fit-n-Dex.
- It would help in determining a standard - plus the district could be responsible for providing necessary forms.
- Yes, more recognition for average students.
- Yes, I feel it would provide for more consistency throughout all programs. It would make every body more accountable. It would have to be one that most everyone would feel comfortable with.
- A consistent means of fitness measurement is necessary for the district as a way to indicate our students' needs.
- It would hold P. E. teachers and schools responsible for the overall fitness for today's youth. It would make Physical Education classes have more prestige in the community.
- I think it should be part of the testing competencies just like for any other subject matter class.
- I do believe PPS needs a standardized test so we are all measuring the same components of fitness. However, I do not believe test scores or outcomes need be set t a standard so that competitive attitudes develop. Scores should be used prescriptively by instructors to improve students fitness levels.
- Unrealistic goal unless kids are given P. E. all year and classes are of manageable size.

Question 8.

What method is used for measuring or monitoring fitness in your school?

- 5 - a. The AAPHERD test.
- 5 - b. The Fit-n-Dex.
- 5 - c. Other

If you marked "other", please describe or identify the measure or process used.

Made-up test, combining AAPHERD Test, old Oregon Motor Fitness Test, President's Fitness Test.
Weekly test on one item in our circuit program.
Do my own fitness test as not to promote failure among the over-weight. I will use the Fit-n-Dex as soon as the computer center sends me a disc and I have access to a computer.
We use various test items from other tests that we feel measure total fitness.
Adopted from AAHERD and: 600 yd. run; pushups (1 minute); situps (1 minute) wall-sit (4 minutes max.); flexibility reach.

Question 9.

Are fitness tests given:

- 0 - a. Once a year in the Spring. . .in the Fall.
- 9 - b. Twice a year.
- 6 - c. Periodically throughout the year.

Question 10.

Additional Comments:

The P. E. program at this school is on the back burner as far as priorities are concerned. Too many students - 6th, 7th, 8th grades all in the same classroom. No women P. E. personnel - failure of administration to deal with said problems.
I feel it would be really helpful, in order to have a more consistent and progressive education program, if there was some communication between feeder and receiving schools. Some kind of means to communicate what has been stressed in previous P. E. programs so have a better idea of needs. We have semester program where the kids only have P.

E. for a half a year. I really feel that it would be more beneficial to be on a full year.

I would appreciate a report on the outcome of this survey. I am somewhat skeptical of this survey as it is being used, i.e., tool for evaluation? Perhaps I do not know the extent to which this survey will be used in making decisions. Please include P. E. teachers!

Need an updated curriculum guide with rules to games, drills to teach. The current book has some problems with current games and rules. They are not explicit enough or the games are not there. A fitness guide to exercises/jogging current with today's expectations of middle school kids. Limit class size of P. E. classes to 30-35! How can a P. E. teacher teach 45 students at one time!

Our class loads are approximately 30 students each. This is favorable in comparison to many middle schools. However, we only see these students for half of the school year making a continuing fitness maintenance impossible.

Middle School program is unit-oriented, we would have to drop certain sports if adding a "true" fitness program (i.e., 20-30 minute workouts). Question: Why "get them in shape" when they transfer out at the end of the semester? High school requirements are almost non-existent - middle school is the last place to be exposed to a variety of sports.

Appendix D

Physical Education Curriculum

- o K-8 Continuum Indexes and sample pages

PHYSICAL EDUCATION
INDEX OF CATEGORIES
Grades K-2

1. MOVEMENT
2. FITNESS AND BODY DEVELOPMENT
3. GAMES AND SPORTS
4. GYMNASTICS
5. RHYTHMS
6. PERSONAL AND SOCIAL DEVELOPMENT

NOTE: The term "reinforce" means that the skills presented in the previous grade should be reviewed and, when possible, extended to a higher level of application.

Category	Component	K	I	2
FITNESS AND BODY DEVELOP- MENT	Arm and shoulder development	Demonstrates the shoulder shrug	Reinforce	Reinforce
		Demonstrates a shoul- der flex with arm ex- tended: forward, back, side, and rota- tion	Reinforce	Reinforce
		Raises extended arms to a vertical posi- tion	Reinforce	Reinforce
		Demonstrates an el- bow flex	Reinforce	Reinforce
		Demonstrates wrist flexes: front, back, lateral, and rotation	Reinforce	Reinforce
		Flexes finger joints	Reinforce	Reinforce
		Performs a pencil hang (static)	Performs a pencil hang and chin down	Demonstrates a flexed arm hang
		Demonstrates a series of wall (standing) push-ups	Reinforce	Reinforce
	Trunk devel- opment	Demonstrates body bends forward, back- ward, and side	Reinforce	Reinforce
		Touches knees, ankles, and toes while bend- ing knees	Reinforce	
		Touches knees and ankles with legs straight	Touches ankles and toes with legs straight	
Leg devel- opment				
	Flexes	Flexes toe, ankle, knee, and hip joints	Reinforce	Reinforce
		58	67	

Category	Component	K	I	2
FITNESS AND BODY DEVELOP- MENT (cont.)	Leg devel- opment (cont.) Rise		Demonstrates shallow knee bends	Reinforce
		Demonstrates toe lifts	Reinforce	Reinforce
		Demonstrates in-place hops	Reinforce	Reinforce
	Jump		Demonstrates forward jump over a station- ary or half-swinging long rope	Jumps a full-turning long rope
			Performs a single jump using a short rope	Enters and jumps a full turning long rope e.g., front door Performs a series of jumps using a short rope Performs a single jump using a back- ward turning short rope
		NOTE: See MOVEMENT, Locomotors, Jumping-----		
	Run	NOTE: See MOVEMENT, Locomotors, Running-----		
		59	68	

PHYSICAL EDUCATION
INDEX OF CATEGORIES AND COMPONENTS
Grades 3-5

Category	Component
1. MOVEMENT	Locomotors Non-locomotors
2. FITNESS AND BODY DEVELOPMENT	Arm and shoulder development Trunk development Leg development Total body development
3. GAMES AND SPORTS	Basic game and sport skills Simplified games Relays Team sports Individual and recreational games and sports
4. GYMNASTICS	Safety Tumbling Stunts Apparatus
5. RHYTHMS	Foundation skills Dance
6. PERSONAL AND SOCIAL DEVELOPMENT	Sportsmanship Personal hygiene

PHYSICAL EDUCATION
Grades 3-5

Category	Component
2. FITNESS AND BODY DEVELOPMENT	Arm and shoulder development
	Trunk development
	Leg development
	Total body development

Category	Component	3	4	5
FITNESS AND BODY DEVELOP- MENT	Arm and shoulder development	Demonstrates the shoulder shrug Demonstrates shoulder flexes with arms extended: forward, back, side, rotation Demonstrates an elbow flex Demonstrates wrist flexes: front, back, lateral, and rotation Demonstrates a flexed arm hang Demonstrates one pull-up (optional for girls) Demonstrates a series of wall (standing) pushups	Reinforce Reinforce Reinforce Reinforce Reinforce Demonstrates two pull-ups (optional for girls) Demonstrates a modified (knee) pushup	Reinforce Reinforce Reinforce Reinforce Demonstrates a flexed arm hang for 10 to 21 seconds Demonstrates 3 to 6 pullups (optional for girls) Demonstrates 5 to 10 modified (knee) push-ups
	Trunk devel- opment	Demonstrates trunk twisting exercises e.g., windmill, trunk twister, waist circle Demonstrates various back stretching exercises e.g., straight-leg toe touch, back stretcher	Reinforce Demonstrates 5 to 10 repetitions of back stretching exercises e.g., straight-leg toe touch, back stretcher, cross leg toe touch Demonstrates "The Seal" stationary and rocking Demonstrates 5-30 bent-knee sit-ups	Reinforce Reinforce Reinforce Demonstrates a series of 25-45 bent-knee sit-ups
		62	71	

Category	Component	3	4	5
FITNESS AND BODY DEVELOP- MENT (cont.)	Leg devel- opment			
		Flexes	Demonstrates ankle ro- tation	Reinforce
			Demonstrates knee joint flex with leg extension	Reinforce
			Demonstrates hip joint flex with bent or straight leg e.g., leg swing, leg rotation	Demonstrates lying hip roll (log roll)
	Rise		Demonstrates sitting hip roll	Reinforce
			Demonstrates shallow knee bend (15 to 20)	Reinforce
			Demonstrates toe lifts (15 to 30)	Reinforce
			Demonstrates step-ups e.g., bench step, step test	Demonstrates toe lifts from a step or plat- form (15 to 30)
	Run		Demonstrates 10 to 15 in-place hops	Reinforce
			Performs 50-yard dash in 10-12 seconds	Reinforce
			Performs 50-yard dash in 8-10 seconds	Performs 50-yard dash in 7 to 9 seconds
			Performs 600-yard run/ walk in 2 to 4 minutes	Performs 600-yard run/ walk in 2 to 3 minutes
	Jump		Performs 5 to 15 con- tinuous vertical jump reaches	Performs 40-yard shuttle run in 10 to 12 seconds
			Enters and jumps a full-turning long rope e.g., backdoor, front door	Reinforce
			Reinforce	Jumps "Double Dutch" long ropes

Category	Component	3	4	5
FITNESS AND BODY DEVELOP- MENT (cont.)	Leg develop- ment (cont.)	Performs a series of jumps using a short rope for 1/2 to 1 minute Performs a series of jumps using a backward turning short rope	Reinforce Reinforce Performs running long jump 4 to 6 feet Performs standing broad jump 3 to 5 feet	Reinforce Performs a simple jump rope routine e.g., skip, hop, turn, change direction Reinforce Performs standing broad jump 4 to 6 feet Performs a running jump over a 2-foot-high bar
	Total body development	Performs 10 repetitions of the Windmill Performs 10 repetitions of Jumping Jack	Reinforce Reinforce Performs Tread Mill for 30 seconds	Reinforce Reinforce Performs Tread Mill for 45 seconds

PHYSICAL EDUCATION

INDEX OF CATEGORIES

Grades 6-8

1. MOVEMENT
2. FITNESS AND BODY DEVELOPMENT
3. GAMES AND SPORTS
4. GYMNASTICS
5. RHYTHMS
6. PERSONAL AND SOCIAL DEVELOPMENT

NOTE: The term "reinforce" means that the skills presented in the previous grade should be reviewed and, where possible, extended to a higher level of application.

Category	Component	6	7	8
FITNESS AND BODY DEVELOP- MENT	Arm and shoulder development	Demonstrates a shoul- der lift with light weight	Reinforce	Reinforce
		Demonstrates shoulder flexes with arms ex- tended (no weights)	Reinforce	Reinforce
		Demonstrates an elbow flex (curl) with light weights	Reinforce	Reinforce
		Demonstrates wrist flexes with light weights	Reinforce	Reinforce
		Demonstrates a flexed arm hang for 10 to 21 seconds	Reinforce	Reinforce
		Demonstrates 3 to 6 pullups (optional for girls)	Reinforce	Demonstrates 4 to 8 pullups (optional for girls)
		Demonstrates 5 to 10 modified (knee) push- ups	Reinforce	Reinforce
		Demonstrates a series of bench presses with light weights	Reinforce	Reinforce
	Trunk development	Demonstrates trunk twisting exercises e.g., windmill, trunk twister, waist circle	Reinforce	Reinforce
		Demonstrates 5 to 10 repetitions of various back stretching exer- cises e.g., straight leg toe touch, back stretcher, cross leg toe touch, hurdle stretch	Reinforce	Reinforce
		Demonstrates "The Seal" stationary and rocking (5-10 sec.)	Reinforce	Reinforce

Category	Component	6	7	8
FITNESS AND BODY DEVELOP- MENT (cont.)	Trunk development (cont.)	Demonstrates an "L" lift and an "L" hang Demonstrates a series of 30-100 bent-knee sit-ups	Reinforce Reinforce	Demonstrates two or more "L" lifts Reinforce
	Leg development			
	Flexes	Demonstrates ankle ro- tation	Reinforce	Reinforce
		Demonstrates knee- joint flex with leg extension	Reinforce	Reinforce
		Demonstrates lying hip roll	Reinforce	Reinforce
		Demonstrates standing and sitting leg raiser	Reinforce	Reinforce
		Demonstrates hurdle stretcher	Reinforce	Reinforce
	Rise	Demonstrates 20 to 30 shallow knee bends	Reinforce	Reinforce
		Demonstrates 15 to 30 toe lifts from a step or platform with light weights	Reinforce	Reinforce
		Demonstrates step-ups e.g., bench step	Reinforce	Reinforce
		Demonstrates 15 to 20 hops	Reinforce	Reinforce
	Run	Performs 50-yard dash in 7 to 9 seconds	Reinforce	Reinforce
		Performs 600-yard run/ walk in 2 to 2-1/2 minutes	Reinforce	Reinforce

Category	Component	6	7	8
FITNESS AND BODY DEVELOP- MENT (cont.)	Leg development (cont.)			
	Run (cont.)	Performs 40-yard shuttle run in 10 to 11-1/2 seconds Jogs 5 to 7 minutes	Performs 40-yard shuttle run in 10 to 11 seconds Jogs 6 to 9 minutes	Reinforce Jogs 7 to 10 minutes
	Jump	Performs 10 to 20 con- tinuous vertical jump reaches	Reinforce	Reinforce
		Jumps "Double Dutch" long rope	Reinforce	Reinforce
		Jumps a short rope for 1 to 2 minutes	Reinforce	Reinforce
		Develops and performs rope jumping routines e.g., cross-overs, twirling and swinging rope, rocking chair, skip, hop, turn, change direc- tion, heel clicks	Reinforce	Reinforce
		Performs running long- jump 5 or more feet	Performs running long jump 7 or more feet	Performs running long jump 9 or more feet
		Performs standing broad jump 5 or more feet	Reinforce	Reinforce
		Performs a running jump over a 2-1/2 to 4 foot bar	Reinforce	Performs a running jump over a bar, 3 or more feet high
	Total body development	Performs 20 or more repetitions of the windmill	Reinforce	Reinforce
		Performs 20 or more repetitions of the jumping jack	Reinforce	Reinforce
		Performs tread mill for 1 minute	Performs tread mill for 1-1/2 minutes	Performs tread mill for 2 minutes

Appendix E

Fit-N-Dex Student Profile

CRAMER EDUCATIONAL SERVICES

***** FIT-N-DEX FOR PHYSICAL EDUCATION (C) *****

AGE: 14

HEALTH FITNESS ANALYSIS

TEACHER:

REPORT DATE: 09/05/86

AC. INT/DI. NER

TEST DATE: 09/05/86

TEST # 1

GRADE: 9

CLASS PERIOD: 7TH

Percentiles are scores that compare your child to other children in his/her age group. A percentile score of 50 is average and means that he/she has measured better than 50% of the other children in his/her age group. Also, 49% of the children in his/her age group are considered to be in better condition than your child.

--- BODY COMPOSITION ---

SKINFOLDS: A measure of body fat which indicates susceptibility to degenerative diseases such as hypertension, heart disease, diabetes, psychological disorders, and impaired tolerance to heat.

HEIGHT = 65 IN

WEIGHT = 173 LBS

	EVALUATION	PERCENTILE	GOAL
SKINFOLD SUMS = 76 MM	POOR	<10	35 MM

FOR IMPROVEMENT, SHOULD INCREASE ACTIVITY LEVEL AND EVALUATE DIETARY HABITS.

--- CARDIORESPIRATORY ENDURANCE ---

1 MILE RUN: Measures capacity of cardiorespiratory system and indicates resistance to heart disease.

	EVALUATION	PERCENTILE	GOAL
1 MILE RUN = 13:16 MIN:SEC	POOR	<10	12:10 M:SEC

FOR IMPROVEMENT, SHOULD EXERCISE OR INCREASE ACTIVITY LEVEL FOR A MINIMUM LENGTH OF 15 MINUTES / DAY.

--- LOW BACK & HAMSTRING FLEXIBILITY ---

SIT & REACH: Indicates susceptibility to low back problems and/or muscle strains of the lower back or legs.

	EVALUATION	PERCENTILE	GOAL
	-----	-----	-----
SIT & REACH = 19 IN	GOOD	80	22 IN

FOR IMPROVEMENT, SHOULD DO STRETCHING ACTIVITIES FOR THE ENTIRE BODY.

--- STRENGTH ---

SIT-UPS: Indicates strength of abdominals in preventing low back problems.

FLEXED ARM HANG: Measures strength of arms for performance of many tasks as well as the ability to hold one's body up in a life-threatening situation.

	EVALUATION	PERCENTILE	GOAL
	-----	-----	-----
SIT-UPS = 32/MIN	FAIR	40	37/MIN
FLEXED ARM HANG = 0 SEC	POOR	20	1 SEC

FOR IMPROVEMENT, SHOULD DO ACTIVITIES THAT EXERCISE THE ENTIRE BODY, PARTICULARLY THE UPPER BODY AND ARMS.

Please retain this copy for future reference concerning your child's fitness improvement.